

Amendments to the Claims:

This following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1–20. (canceled)

21. (currently amended) A method ~~for producing an apparatus for containing a work piece and for directing fluid flow over said work piece during processing, the method~~ comprising:

providing a housing that defines an interior chamber, an end and an opposite end of said housing hereinafter being referred to as first and second ends of said housing, respectively, said housing having a first opening nearer said first end than said second end; and

providing a conduit connected to said housing, said conduit including a second opening that opens into said interior chamber and a third opening, said third opening being nearer to said first end than to said second end,

wherein a fluid flow is from one of said first opening and said second opening to another of said first opening and said second opening, and one of said third and first openings is to accept input fluid and another of said third and first openings is to produce fluid output,

wherein input fluid enters the interior chamber only through at least one of the first or third opening.

22. (original) A method according to claim 21, wherein said fluid flow includes gas flow.

23. (original) A method according to claim 21, wherein said housing is to comprise a tube that is capable of being heated in a tube furnace.

24. (original) A method according to claim 21, wherein said housing is to comprise a quartz tube.

25. (original) A method according to claim 24, wherein said conduit comprises a quartz member and said step of providing said conduit comprises quartz welding said quartz member to said quartz tube.

26–30. (canceled)

31. (previously presented) The method of claim 21 wherein said second end of said housing comprises no openings.

32. (previously presented) A method comprising:

providing a housing that defines an interior chamber, the housing having a first end and a second end, the second end being an opposite end to the first end, and the housing having a first opening nearer the first end than the second end; and

providing a conduit coupled to the housing, the conduit having a second opening that opens into the interior chamber and a third opening, wherein the third opening is nearer to the first end than to the second end and at least a portion of the conduit extends along a wall of the housing and comprises a surface outside the housing,

wherein a fluid flow is from at least one of the first to the second opening or the second to the first opening, and when the third opening accepts input fluid, the first opening produces output fluid, and when the first opening accepts input fluid, the third opening produces output fluid.

33. (previously presented) The method of claim 32 wherein the fluid flow comprises a gas flow.

34. (previously presented) The method of claim 32 comprising:

inserting the housing into a tube furnace and making connections only to the first and third openings.

35. (previously presented) The method of claim 32 wherein the second opening is an opening of the housing.

36. (previously presented) The method of claim 32 wherein input fluid enters the interior chamber only through at least one of the first or third opening.

37. (previously presented) A method comprising:

providing a housing that defines an interior chamber, the housing having a first end and a second end, the second end being an opposite end to the first end, and the housing having a first opening nearer the first end than the second end; and

providing a conduit coupled to the housing, the conduit having a second opening that opens into the interior chamber and a third opening, wherein the third opening is nearer to the first end than to the second end, and a cross section of at least a portion of the conduit comprises a first wall outside the interior chamber and a second wall forming a surface of the interior chamber, and the second wall and the housing meet at two points of the cross section,

wherein a fluid flow is from at least one of the first to the second opening or the second to the first opening, and when the third opening accepts input fluid, the first opening produces output fluid, and when the first opening accepts input fluid, the third opening produces output fluid.

38. (previously presented) The method of claim 37 wherein the fluid flow comprises a gas flow.

39. (previously presented) The method of claim 37 comprising:

inserting the housing into a tube furnace and making connections only to the first and third openings.

40. (previously presented) The method of claim 37 wherein the second opening is an opening of the housing.

41. (previously presented) The method of claim 37 wherein input fluid enters the interior chamber only through at least one of the first or third opening.

42. (previously presented) A method comprising:
providing a housing having a first end and a second end, the second end being an opposite end to the first end, and the housing having a first opening nearer the first end than the second end; and

providing a conduit coupled to the housing, the conduit having a second opening that opens into an interior chamber and a third opening, wherein the third opening is nearer to the first end than to the second end, and a cross section of at least a portion of the conduit forms an annular ring around at least a portion of the interior chamber of the housing,

wherein a fluid flow is from at least one of the first to the second opening or the second to the first opening, and when the third opening accepts input fluid, the first opening produces output fluid, and when the first opening accepts input fluid, the third opening produces output fluid.

43. (previously presented) The method of claim 42 wherein the fluid flow comprises a gas flow.

44. (previously presented) The method of claim 42 comprising:
inserting the housing into a tube furnace and making connections only to the first and third openings.

45. (previously presented) The method of claim 42 wherein the second opening is an opening of the housing.

46. (currently amended) The method of claim 42 wherein input fluid enters the interior chamber only through at least one of the first or third opening.

47. (previously presented) The method of claim 42 wherein the annular ring is concentric with a cross section of the interior chamber.

48. (previously presented) The method of claim 42 wherein the annular ring defines the interior chamber of the housing.

49. (previously presented) The method of claim 42 wherein the housing forms an outer edge of the annular ring.

50. (previously presented) A method comprising:

providing a housing that defines an interior chamber, the housing having a first end and a second end, the second end being an opposite end to the first end, and the housing having a first opening nearer the first end than the second end; and

providing a conduit coupled to the housing, the conduit having a second opening that opens into the interior chamber and a third opening, wherein the third opening is nearer to the first end than to the second end, and a cross section of the housing and conduit form concentric shapes,

wherein a fluid flow is from at least one of the first to the second opening or the second to the first opening, when the third opening accepts input fluid, the first opening produces output fluid, and when the first opening accepts input fluid, the third opening produces output fluid.

51. (previously presented) The method of claim 50 wherein the fluid flow comprises a gas flow.

52. (previously presented) The method of claim 50 comprising:

inserting the housing into a tube furnace and making connections only to the first and third openings.

53. (previously presented) The method of claim 50 wherein the cross section of the conduit defines the interior chamber of the housing.

54. (previously presented) The method of claim 50 wherein the cross section of the housing forms an outer edge of the conduit.

55. (previously presented) The method of claim 50 wherein the cross section of the conduit is within the interior chamber of the housing.

56. (previously presented) The method of claim 50 wherein the cross section of the housing surrounds an outer edge of the conduit.

57. (previously presented) The method of claim 50 wherein the second opening is an opening of the housing.

58. (previously presented) The method of claim 50 wherein input fluid enters the interior chamber only through at least one of the first or third opening.

59. (previously presented) A method comprising:
providing a housing that defines an interior chamber, the housing having a first end and a second end, the second end being an opposite end to the first end, and the housing having a first opening nearer the first end than the second end; and
providing a conduit coupled to the housing, the conduit having a second opening that opens into the interior chamber and a third opening, wherein the third opening is nearer to the first end than to the second end,
wherein a fluid flow is from at least one of the first to the second opening or the second to the first opening, and when the third opening accepts input fluid, the first opening produces output fluid, and when the first opening accepts input fluid, the third opening produces output fluid, and the second opening is coupled to the second end of the housing.

60. (previously presented) The method of claim 59 wherein the fluid flow comprises a gas flow.

61. (previously presented) The method of claim 59 comprising:
inserting the housing into a tube furnace and making connections only to the first and third openings.

62. (previously presented) The method of claim 59 wherein input fluid enters the interior chamber only through at least one of the first or third opening.

63. (previously presented) A method comprising:

providing a housing that defines a chamber, a first end and a second end, opposite of the first end, of the housing, the housing comprising a first opening nearer the first end than the second end; and

providing a conduit coupled to the housing, the conduit comprising a second opening that opens into the chamber and a third opening, the third opening being nearer to the first end than to the second end,

wherein a fluid enters the chamber only through at least one of the first or third opening.

64. (previously presented) The method of claim 63 wherein the fluid is a gas.

65. (previously presented) The method of claim 63 wherein a fluid flow is from at least one of the first to the second opening or the second to the first opening, and when the third opening accepts an input fluid, the first opening produces an output fluid.

66. (previously presented) A method comprising:

providing a housing that defines an interior chamber, an end and an opposite end of the housing hereinafter being referred to as first and second ends of the housing, respectively, the housing having a first opening nearer the first end than the second end; and

providing a conduit connected to the housing, the conduit including a second opening that opens into the interior chamber and a third opening, the third opening being nearer to the first end than to the second end,

wherein a fluid flow is from one of the first opening and the second opening to another of the first opening and the second opening, and one of the third and first openings is to input fluid and another of the third and first openings is to produce fluid output,

wherein fluid enters the interior chamber only through at least one of the first or third opening.

67. (previously presented) The method of claim 66 wherein the second end of the housing comprises no openings.

68. (previously presented) The method of claim 67 wherein the housing is an undivided tube.

69. (previously presented) The method of claim 67 wherein the housing is made wholly of one material.

70. (previously presented) The method of claim 66 wherein the housing comprises an undivided tube, being open at the first end and closed at the second end.

71. (previously presented) The method of claim 66 wherein the housing comprises an undivided tube, being dome shaped at the second end.

72. (previously presented) The method of claim 66 wherein the interior chamber comprises an undivided space from the first end to the second end, and the housing is closed at the second end.

73. (previously presented) The method of claim 66 wherein the interior chamber comprises an undivided space from the first end to the second end, and said second end is dome shaped.

74. (previously presented) The method of claim 66 wherein the housing is made wholly of one material.

75. (previously presented) The method of claim 66 wherein said second opening is nearer said second end than said first end.

76. (previously presented) The method of claim 21 wherein said housing comprises an undivided tube, being open at said first end and closed at said second end.

77. (previously presented) The method of claim 21 wherein said housing comprises an undivided tube, being dome shaped at said second end.

78. (previously presented) The method of claim 21 wherein said interior chamber comprises an undivided space from the first end to the second end, and said housing is closed at said second end.

79. (previously presented) The method of claim 21 wherein said interior chamber comprises an undivided space from the first end to the second end, and said second end is dome shaped.

80. (previously presented) The method of claim 21 wherein said housing is made wholly of one material.

81. (previously presented) The method of claim 80 wherein said material is translucent.

82. (previously presented) The method of claim 80 wherein said material is crystalline.

83. (previously presented) The method of claim 80 wherein said housing is nonconductive.

84. (previously presented) The method of claim 31 wherein said housing is an undivided tube.

85. (previously presented) The method of claim 31 wherein said housing is made wholly of one material.

86. (previously presented) The method of claim 31 wherein said second opening is nearer said second end than said first end.